

REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

A. THE PRIOR ART REJECTIONS

Claims 3-5 and 7-10 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 7,113,158 to Fujiwara et al in view of U.S. Patent 7,446,733 to Hirimai and further in view of U.S. Publication 2007/0152934 to Maeda. Claims 11-12 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 7,113,158 to Fujiwara et al in view of U.S. Publication 2007/0152934 to Maeda, and further in view of U.S. Patent 7,098,069 to Yamazaki et al. Claim 13 stands rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 7,113,158 to Fujiwara et al in view of U.S. Publication 2007/0152934 to Maeda, in view of U.S. Patent 7,098,069 to Yamazaki et al, and further in view of U.S. Patent 5,600,461 to Ueda et al. Claim 14 stands rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 7,113,158 to Fujiwara et al in view of U.S. Publication 2007/0152934 to Maeda, in view of U.S. Patent 7,098,069 to Yamazaki et al, and further in view of U.S. Patent 6,040,841 to Murukami et al. Claims 14-18 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 7,113,158 to Fujiwara et al in view of U.S. Publication 2007/0152934 to Maeda, in view of U.S. Patent 7,233,441 to Sonhara, in view of U.S. Patent 6,040,814 to Murukami et al, and further in view of U.S. Patent 7,098,069 to Yamazaki et al. All prior art rejections are respectfully traversed for at least the following reasons.

B. THE DEFICIENCY OF THE OFFICE ACTION

Applicants observe that the July 2, 2010 office action is deficient in several respects.

First, the office action essentially ignores the claim amendments which were implemented in the August 10, 2009 amendment. In this respect enumerated paragraph 2

on page 2 of the office action persists with identical 35 USC §112, second paragraph, rejections as appeared in the previous office action, but which rejection were mooted by claim amendments of the August 10, 2009 amendment.

Second, the office action essentially repeats the prior art rejections of the previous office action, and additionally rejects claims added by the August 10, 2009 amendment, but without any substantive answer to Applicants' August 10, 2009 arguments and contentions. It is neither productive nor proper for the Office not to respond to patentability contentions. Since the Office has chosen not to address or respond to Applicants' arguments, Applicants consider the arguments as valid and uncontroverted, and accordingly reassert those earlier arguments in section C below for consistency of the record. Further, in section D below Applicants add yet further patentability arguments.

C. UNCONTROVERTED PATENTABILITY ARGUMENTS (REPEATED)

The subject matter of the independent claims is generally directed to prevention of crosstalk in a 3D display apparatus, especially crosstalk due to diffraction phenomenon caused at narrow gap sections included in a pixel pattern (see, for example, paragraphs [0011] through [0013] of the specification).

Of the narrow gap sections causing the aforementioned crosstalk, the largest one is formed due to the shape of the auxiliary capacitor wiring. The inventors have specifically determined finding that narrow gap sections are created in a pixel pattern by the shape of the auxiliary capacitor wiring, and the diffraction phenomenon at the narrow gap sections thus created causes crosstalk.

U.S. Patent 7,113,158 to Fujiwara appears to be cited merely because it mentions a TFT active matrix LCD (see col. 10, lines 10 – 11). In any event, the office action correctly admits that Fujiwara fails to disclose:

(1) a display image separating means for separating the display image, at one time or in a time division manner, according to a plurality of viewpoints

and

(2) aperture sections in each pixel pattern of the display panel having a width set so as not to fall within a range specified by the following inequality: $2\text{ }\mu\text{m} < (\text{minimum width of the aperture sections in the pixel}) < 7\text{ }\mu\text{m}$.

The office action then attempts to combine U.S. Patent 7,113,158 to Fujiwara with both U.S. Patent 7,446,733 to Hirimai and U.S. Publication 2007/0152934 to Maeda. Unfortunately, it is not clear from the office action what portions of the Hirimai and Maeda are alleged to correspond to missing features (1) and (2).

For example, the office action cites ¶[0307] of U.S. Publication 2007/0152934 to Maeda. But this paragraph primarily discusses improving aperture ratio by reducing the area by which transistors might obscure light from an organic electroluminescent layer. Applicants fail to understand how Maeda ¶[0307] paragraph teaches or suggests missing feature (2).

Moreover, each of U.S. Patent 7,113,158 to Fujiwara, U.S. Patent 7,446,733 to Hirimai, and U.S. Publication 2007/0152934 to Maeda has different and varying technical objectives.

In rejecting dependent claim 4, on page 4 the office action baldly states that the combination of three references (U.S. Patent 7,113,158 to Fujiwara, U.S. Patent 7,446,733 to Hirimai, and U.S. Publication 2007/0152934 to Maeda) teach missing feature (2) as quoted above. But the office action does not specifically cite support for the missing feature (2) in any one reference. Nor do Applicants understand how the alleged synthesis of three references would somehow result in missing feature (2).

Concerning independent claim 5, the office action makes similar allegations as against independent claim 3, but further adds that U.S. Publication 2007/0152934 to Maeda teaches a light shielding film. In this regard, the office action appears to point to ¶[0252] of Maeda. However, ¶[0252] of Maeda particularly pertains to placement or formation of a light shielding film on transistors 11, and on their lower layer or upper layer in order to prevent picture degradation due to photoconductor phenomena caused by having light incident on the transistors 11. Applicants submit that that the Maeda light shielding film does not have the same positioning or purpose as the claimed light shielding film.

A feature of independent claim 8 is that the auxiliary capacity wiring has a narrower line width at an intersection with a source line than a line width in a pixel pattern. This feature allows a reduction in negative capacitance by reducing an area of the intersection of the source line and the auxiliary capacitor wiring. None of the applied references teach or suggest such a feature.

D. ADDITIONAL PATENTABILITY ARGUMENTS

Claim 3 includes the feature that aperture sections in each pixel pattern of the display panel have a width set so as not to fall within a range specified by the following inequality: $2\ \mu\text{m} < (\text{minimum width of the aperture sections in the pixel}) < 7\ \mu\text{m}$. The office action alleges that paragraph [0307] of Maeda discloses this feature. However, Maeda only discloses use of a low-temperature polycrystalline Si-transistor to reduce the size of a transistor and to improve an aperture ratio. Reducing the size of a transistor does not have a direct influence on the width of an aperture section. Accordingly, Maeda does not disclose the feature of claim 3.

Claim 5 includes the feature of a light shielding film provided to avoid light entering aperture sections, in each pixel pattern of the display panel, having a gap. The office action alleges that paragraph [0252] of Maeda discloses this feature. However,

Maeda only discloses a light shielding film formed or placed in the lower layer or upper layer of a transistor in order to prevent picture degradation due to a photoconductor phenomenon. That is, in Maeda, a light shielding film is formed in such a manner as to overlap a transistor. This configuration is different from that of the Applicants' independent claim 5 in which a light shielding film is formed in a gap in a pixel in order to subdue a crosstalk due to diffraction in the gap.

Claim 8 includes the feature that the auxiliary capacity wiring has a narrower line width at an intersection with a source line than a line width in a pixel pattern. The office action alleges that Fig. 2 and paragraph [0328] of Maeda disclose this feature. However, it is unclear from Fig. 2 and paragraph [0328] of Maeda what component corresponds to Applicants' auxiliary capacity wiring. Maeda relates to an organic EL panel and therefore does not require auxiliary capacity wiring as required by claim 8.

Maeda relates to an organic EL panel, and does not relate to a transmission-type liquid crystal display panel, unlike Applicants' technology. Applicants' technology was made based on a transmission-type liquid crystal display panel which supplies different images to a plurality of observers, such as a 3D display, and an object of Applicants' technology is to suppress a crosstalk due to diffraction phenomenon inherent to a transmission-type liquid crystal display panel.

Since the organic EL panel is not a transmission-type, the organic EL panel is not required to achieve the above object in principle. Accordingly, it would be untenable to combine Maeda with any other cited reference in an ineffectual effort to reject Applicants' claims.

E. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly requested.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /H. Warren Burnam, Jr./
H. Warren Burnam, Jr.
Reg. No. 29,366

HWB:lsb
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100